

## Publications page

### **Selected LOCAD Publications:**

Maule J., Wainwright N. and Abercromby A. (2007). "Function of second and third generation Lab-on-a-Chip cartridges in microgravity: Preparation for operations on the International Space Station (ISS)". **NASA report: TM-2007-214765** "C-9 and other microgravity simulations", September 2007.

Hall. J.A., Felnagle, M., Fries, M, Spearing S., Monaco L.A., and A. Steele (2006) An Evaluation of Prokaryotic Cell Lysis, DNA Extraction and Life Detection Efficiency for Techniques Associated with Astrobiology instrumentation development. **Planetary Space Science**, Vol. 54 (15) Pp. 1600-1611.

Johnson B., Chen, C.P., Jenkins, A., Spearing, S., Monaco L.A., Steele, A., and G. Flores (2006). Two Phase Flow Analysis on Filling Processes of Microfluidic/Micro array Integrated Systems. **Earth and Space** 2006, 40830-13687.

Maule J., Steele A., Burbank D., Eppler D., Kosmo J., Ross A., Wainwright N., Child A., Flores G., Monaco L., Graziosi D. and Splawn K. (2006). "Monitoring forward contamination during simulated surface extra-vehicular activity (EVA) at Meteor Crater, Arizona: Implications for human exploration of the moon and Mars". **Astrobiology**, Vol. 6, No. 1, p. 275, February 2006.

Martin R., Maule J., Monaco L., Jenkins A., Prasher D., Wainwright N. and Steele A. (2006). "Antibody microarrays for real-time monitoring of microbial environment and astronaut health". **Astrobiology**, Vol. 6, No. 1, p. 211, February 2006.

Avci R., Schweitzer M., Boyd R., Wittmeyer J., Steele A., Toporski J., Beech I., Teran Arce F., Spendlar B., Cloe K. & McKay D. S. (2005). Antibody-antigen interactions on collagen as a model system for application to AFM to the search for extraterrestrial life. **Chemical Physics, Physical Chemistry**.

Maule J., Toporski J. and Steele A. (2005). "Labeling and detection of Mars analog regolith with antibody microarray". **Astrobiology**, Vol. 5, No. 2, 2005, p. 289.

Avci R., Schweitzer M., Boyd R. D., Wittmeyer J., Steele A., Toporski J., Beech I., Teran Arce F., Spangler B., Cole K. M. & McKay D. S. (2004). Comparison of antibody-antigen interactions on collagen measured by conventional immunological techniques and atomic force microscopy. **Langmuir**, 20: 11053-11063. (2004).

Maule J., Fogel M., Steele A., Wainwright N., Pierson D. and McKay D. (2004). "Antigen-Antibody Interactions in Altered Gravity: Implications for Immunosorbent Assay during Space Flight". **J. Gravitational Physiology**, Vol. 10, Issue 2, 2004.